developing the wafer having the pattern transferred thereto.

REMARKS

Applicant requests favorable consideration and allowance of the subject application in view of the preceding amendments and the following remarks.

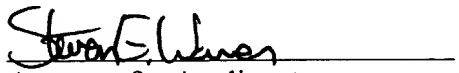
Claims 1-8 and 11-26 are presented for consideration. Claims 1, 11, and 22 are independent.

Claim 1 has been amended to clarify features of the invention. Support for these changes can be found in the application, as filed. Specifically, these changes reflect the relationship between the solid lines shown in Figures 6 and 9. Accordingly, no new matter has been added by these changes.

Applicant submits that the pending claims are allowable for the reasons set forth in the Amendment After Final Rejection filed on September 21, 2001. Therefore, Applicant further submits that the instant application is in condition for allowance. Favorable consideration and an early passage to issue are requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our address listed below.

Respectfully submitted,



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APPENDIX A

IN THE CLAIMS

1. (Twice Amended) An illumination optical system having a total reflection type light transmitting element, for illuminating a surface to be illuminated, said illumination optical system comprising:

an imaging optical system for forming an image of a light source [by use of a light from the light source]; and

a light directing [collecting] optical system for directing light from the light source image to the light transmitting element [and being effective to make the numerical aperture thereof small], wherein light incident on the light transmitting element has a numerical aperture, at an entrance surface of the light transmitting element, which is smaller than a numerical aperture of light incident on said light directing optical system, at an entrance surface of said light directing optical system.

16. (Amended) An illumination optical system according to Claim 12, wherein said imaging optical system includes first and second lens units having the same focal distance and being disposed so that a distance between principal points of the two lens units becomes equal to the focal distance, and wherein an entrance pupil of the first lens unit [units] is disposed substantially in coincidence with the light source image while an exit

pupil of the second lens unit is disposed substantially in coincidence with a light entrance surface of said optical fiber bundle.